



UNITED STATES
NUCLEAR REGULATORY COMMISSION

REGION III
801 WARRENVILLE ROAD
LISLE, ILLINOIS 60532-4351

APR 11 2002

Department of the Army
Timothy J. Mohs
Chief, Safety Office
U.S. Army Tank-Automotive and
Armaments Command-Rock Island
ATTN: AMSTA-LC-SF
Rock Island, IL 61299-7630

Dear Mr. Mohs:

Enclosed is Amendment No. 40 to your NRC Material License No. 12-00722-06 in accordance with your request. Please note that the changes made to your license are printed in **bold font**.

Please review the enclosed document carefully and be sure that you understand all conditions. If there are any errors or questions, please notify the U.S. Nuclear Regulatory Commission, Region III office at (630) 829-9887 so that we can provide appropriate corrections and answers.

Please be advised that your license expires at the end of the day, in the month, and year stated in the license. Unless your license has been terminated, you must conduct your program involving byproduct materials in accordance with the conditions of your NRC license, representations made in your license application, and NRC regulations. In particular, note that you must:

1. Operate in accordance with NRC regulations 10 CFR Part 19, "Notices, Instructions and Reports to Workers; Inspections," 10 CFR Part 20, "Standards for Protection Against Radiation," and other applicable regulations.
2. Notify NRC, in writing, within 30 days:
 - a. When the Radiation Safety Officer permanently discontinues performance of duties under the license or has a name change; or
 - b. When the mailing address listed on the license changes.
3. In accordance with 10 CFR 30.36(b) and/or license condition, notify NRC, promptly, in writing, and request termination of the license:
 - a. When you decide to terminate all activities involving materials authorized under the license; or
 - b. If you decide not to complete the facility, acquire equipment, or possess and use authorized material.
4. Request and obtain a license amendment before you:

- a. Change Radiation Safety Officers;
 - b. Order byproduct material in excess of the amount, or radionuclide, or form different than authorized on the license;
 - c. Add or change the areas of use or address or addresses of use identified in the license application or on the license; or
 - d. Change ownership of your organization.
5. Submit a complete renewal application or termination request at least 30 days before the expiration date of your license. You will receive a reminder notice approximately 90 days before the expiration date. Possession of byproduct material after your license expires is a violation of NRC regulations. A license will not normally be renewed, except on a case-by-case basis, in instances where licensed material has never been possessed or used.

In addition, please note that NRC Form 313 requires the applicant, by his/her signature, to verify that the applicant understands that all statements contained in the application are true and correct to the best of the applicant's knowledge. The signatory for the application should be the licensee or certifying official rather than a consultant.

You will be periodically inspected by NRC. Failure to conduct your program in accordance with NRC regulations, license conditions, and representations made in your license application and supplemental correspondence with NRC will result in enforcement action against you. This could include issuance of a notice of violation, or imposition of a civil penalty, or an order suspending, modifying or revoking your license as specified in the General Statement of Policy and Procedure for NRC Enforcement Actions. Since serious consequences to employees and the public can result from failure to comply with NRC requirements, prompt and vigorous enforcement action will be taken when dealing with licensees who do not achieve the necessary meticulous attention to detail and the high standard of compliance which NRC expects of its licensees.

Sincerely,



Loren J. Hueter
Materials Licensing Branch

License No. 12-00722-06
Docket No. 030-13027

Enclosure: Amendment No. 40

MATERIALS LICENSE

Pursuant to the Atomic Energy Act of 1954, as amended, the Energy Reorganization Act of 1974 (Public Law 93-438), and Title 10, Code of Federal Regulations, Chapter I, Parts 30, 31, 32, 33, 34, 35, 36, 39, 40, and 70, and in reliance on statements and representations heretofore made by the licensee, a license is hereby issued authorizing the licensee to receive, acquire, possess, and transfer byproduct, source, and special nuclear material designated below; to use such material for the purpose(s) and at the place(s) designated below; to deliver or transfer such material to persons authorized to receive it in accordance with the regulations of the applicable Part(s). This license shall be deemed to contain the conditions specified in Section 183 of the Atomic Energy Act of 1954, as amended, and is subject to all applicable rules, regulations, and orders of the Nuclear Regulatory Commission now or hereafter in effect and to any conditions specified below.

<p>Licensee</p> <p>1. Department of the Army U.S. Army Tank-Automotive and Armaments Command-Rock Island ATTN: AMSTA-LC-SF Rock Island, IL 61299-7630</p>	<p>In accordance with letter dated January 10, 2002</p> <p>3. License number 12-00722-06 is amended in its entirety to read as follows:</p> <p>4. Expiration date August 31, 2008</p> <p>5. Pocket No. 030-13027 Reference No.</p>
<p>6. Byproduct, source, and/or special nuclear material</p> <p>A. Hydrogen-3</p> <p>B. Hydrogen-3</p> <p>C. Hydrogen-3</p> <p>D. Promethium-147</p> <p>E. Hydrogen-3</p> <p>F. Hydrogen-3</p>	<p>7. Chemical and/or physical form</p> <p>A. Gas in sealed glass ampoules</p> <p>B. Gas in sealed glass ampoules</p> <p>C. Gas in sealed glass ampoules</p> <p>D. 3M Model IE2X Sealed Glass encapsulated ceramic band sources in rifle sights</p> <p>E. Tritium gas sealed in glass in rifle sights</p> <p>F. Sealed glass ampoules in sights (Mb Microtec AG Model Nos. 400/1, 400/2, 400/3, 400/4, 400/5 or 400/6)</p>
	<p>8. Maximum amount that licensee may possess at any one time under this license</p> <p>A. Not to exceed 10 curies (370 GBq) per device (See Condition No. 10)</p> <p>B. Not to exceed 10.2 curies (377 GBq) per device (See Condition No. 10)</p> <p>C. Not to exceed 5.79 curies (213 GBq) per unit (See Condition No. 10)</p> <p>D. One millicurie per sight, total not to exceed one curie</p> <p>E. Nine millicuries per sight, total not to exceed nine curies</p> <p>F. No single sight to exceed 210 millicuries, 42 curies total</p>

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9. Authorized Use:

- A. To be used in fire control devices containing self-luminous tritium sources and for possession incident to maintenance and repair of these devices and installation into artillery systems.
- B. For use in Muzzle Reference Sensors (MRS) on the family of main battle tanks used by the United States military services.
- C. For use in the M67 Sight Unit on the M120 and M121, 120mm mortar, the M224 60mm mortar and the M252 81mm mortar.
- D. and E. For possession incident to collection and disposal as radioactive waste only.
- F. To be used in Ranger Antiarmor Antipersonnel Weapon system for enhanced night firing capability.

CONDITIONS

- 10. The total possession limit for Hydrogen-3 shall not exceed 1.5×10^6 curies (55.3 PBq).
- 11. A. Licensed material listed in Item 6.A. through 6.C. and 6.F. may be stored at Rock Island Arsenal, Rock Island, Illinois and may be used at U.S. Army, National Guard and Marine Corps installations and temporary job sites throughout the United States and any other location where the Commission maintains jurisdiction for regulating the possession and/or use of licensed material. Ampoules containing hydrogen-3 shall not be opened or removed from fire control devices except as necessary for device repair and maintenance only at facilities that meet criteria for depot level maintenance as described in letter dated January 10, 2002.
- B. Licensed material listed in Items 6.D. and 6.E. may be possessed incident to collection and disposal as radioactive waste only, throughout the United States and any other location where the Commission maintains jurisdiction for regulating the possession of licensed material.
- 12. A. Licensed material shall be used by, or under the supervision of, Jeffrey Havenner or U.S. Army, National Guard and Marine Corps. civilian and/or military personnel trained in accordance with letter dated January 10, 2002.
- B. Radiation Safety Officer: Jeffrey Havenner
- C. Alternate Radiation Safety Officer: Tim Mohs
- 13. Sealed sources containing licensed material shall not be opened.

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14. The licensee is authorized to transport licensed material only in accordance with the provisions of 10 CFR Part 71, "Packaging and Transportation of Radioactive Material."
15. The licensee shall conduct a physical inventory every twelve (12) months to account for all sealed sources received and possessed under the license. The records of the inventories shall be maintained for inspection by the Commission, and shall include the quantities and kinds of byproduct material, location of sealed sources and the date of the inventory.
16. Notwithstanding the color requirements in 10 CFR 20.1901 (a), the licensee is authorized to label fielded items of equipment with colors as described in letter dated October 29, 1997.
17. Except as specifically provided otherwise in this license, the licensee shall conduct its program in accordance with the statements, representations, and procedures contained in the documents, including any enclosures, listed below. The U.S. Nuclear Regulatory Commission's regulations shall govern unless the statements, representations, and procedures in the licensee's application and correspondence are more restrictive than the regulations.
- A. Letters dated October 29, 1997, May 13, 1998, August 14, 1998, March 18, 1999, November 29, 1999, December 6, 1999 (excluding Page 2, first paragraph, regarding Depot Maintenance Worker training), December 9, 1999, May 2, 2000, [REDACTED] January 10, 2002; and
- B. Facsimiles dated May 18, 1999, March 14, 2000 and February 15, 2001.

FOR THE U.S. NUCLEAR REGULATORY COMMISSION

Date APR 11 2002

By Loren J. Hueter
Loren J. Hueter
Materials Licensing Branch
Region III